United States Environmental Protection Agency
Office of Public Affairs
Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604-3590
Illinois, Indiana
Michigan, Minnesota
Ohio, Wisconsin

Cleanup Planned for SMU 56/57

Lower Fox River Site

July 2000

Crews remove contaminated sediment in 1999 from dewatering lagoon at SMU 56/57 near Green Bay. Sediment removal will resume this summer under a Federal agreement.

Introduction

The United States Environmental Protection Agency (EPA), the Wisconsin Department of Natural Resources (DNR), and Fort James Corporation finalized a Federal agreement on May 26, 2000, to clean up a section of Sediment Management Unit (SMU) 56/57. SMU 56/57 is part of the Lower Fox River project. The current action is a continuation of a dredging project started in 1999. The dredging exposed sediment with high concentrations of polychlorinated biphenyls (PCBs). This cleanup is necessary because of the risks from continued release of contamination into the food chain and potential exposure to the public. The project will require approximately 145 on-site working days and is scheduled to be completed this year.

Location

The cleanup is needed at a part of the site referred to as SMU 56/57-A. SMU 56/57-A is approximately 3.75 acres and is contained within the 10-acre SMU 56/57 site. The site is immediately adjacent to an industrial area on the northwest side of the river. The Fort James Corporation facility is located within this industrial area. Southwest of the site and across the river are commercial and residential properties. SMU 56/57-A is located approximately 4 miles southwest (upstream) from where the Lower Fox River discharges into Green Bay.

Public Meeting

EPA and DNR will explain the cleanup action for the 56/57 site to area residents at a public meeting.

Date: August 3, 2000
Time: 7 p.m.
Place: Brown County Library
Lower Level
515 Pine St.
Green Bay, WI

Availability Sessions

EPA and DNR will be holding a series of availability sessions to explain the progress of the cleanup of SMU 56/57. Availability sessions are informal, open-house style meetings during which members of the community can meet one-on-one with EPA and DNR representatives.

Dates: September 13, October 12, November 7, and December 5, 2000
Time: 5 - 8 p.m.
Place: Brown County Library
Lower Level
515 Pine St.
Green Bay, WI

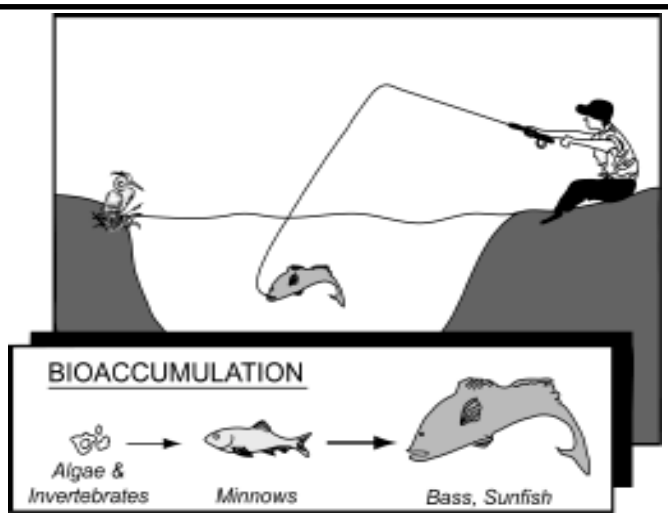
This fact sheet has been prepared in cooperation with the Wisconsin Department of Natural Resources.

PCB Contamination Levels

The average concentration of PCBs in the surface layer of sediment prior to dredging was approximately 4 parts per million (ppm). After the 1999 dredging, the incomplete dredging area had surface concentrations averaging 116 ppm, and some areas were as high as 310 ppm. EPA estimates the volume of PCB-contaminated sediment in SMU 56/57-A to be approximately 21,500 cubic yards, and that sediment contains approximately 1,600 pounds of PCBs. Sampling results indicate that the SMU 56/57-A area contains the highest PCB concentrations detected anywhere in the Lower Fox River.

Dangers of Current PCB Concentrations

Sediment is a source of the ongoing release of PCBs into the waters of the Fox River and Green Bay. The continued release of PCBs into the river could have a detrimental effect on the freshwater organisms living near or downstream of the site. In addition, the SMU 56/57-A site is adjacent to an industrial/residential area and is used for boating and fishing. Unrestricted access to the Fox River, direct contact with the river waters containing contaminated sediment, and the high probability for continued releases of PCBs, create a direct threat to human health and the environment, especially downstream of SMU 56/57-A.



Bioaccumulation is a process where small levels of a chemical are transferred to and concentrated into higher levels in the tissue of animals through the food chain. The PCB-contaminated sediment poses an imminent and substantial danger to the citizens in the community due to the bioaccumulation impacts to aquatic life, fish eating birds, and humans. PCBs are known to accumulate in the fatty tissues of humans and animals. Chronic exposure to PCBs is believed to cause liver damage. PCBs have also been found to cause learning problems and lower intelligence quotients (IQs) in children.

PCB releases into the Lower Fox River and Green Bay have resulted in extensive fish consumption advisories. The population exposed to PCB contamination through fish consumption is very large with approximately 50,000 anglers residing in counties immediately adjacent to the Lower Fox River and Green Bay. Approximately 2,000 Hmong residents are active anglers of the river and bay. They are part of an estimated 5,000 total subsistence fishers in this area.

The cleanup will not cause fish advisories to be removed, but it will reduce releases and risks to human health, welfare and the environment posed by the presence of high PCB concentrations.

Cleanup Action

The agreement among EPA, DNR and Fort James Corporation states that Fort James Corporation will clean up to 50,000 cubic yards of PCB-contaminated sediment to a goal of 1 ppm or an average level of at least 10 ppm with a 6-inch sand cover. Of the 50,000, approximately 21,500 cubic yards will come from SMU 56/57-A. The remaining sediment will come from other areas within SMU 56/57 that may be addressed in a later phase of this cleanup.

Achieving the 10 ppm level would provide a minimally acceptable interim cleanup level. If average concentrations after cleanup are less than 10 ppm, but greater than 1 ppm, Fort James Corporation can achieve compliance by covering the sediment with 6 inches of clean sand. A final level would be 1 ppm for this cleanup and would give Fort James Corporation a complete release from further responsibility for all areas where an average of 1 ppm was attained.

In addition, the edges of the excavated area will be sloped to prevent the contaminated sediment wall from falling into the cleaned area and causing recontamination. These sidewalls will be limited in area and, as required, will be covered with a layer of clean sand.

Fort James Corporation plans to use hydraulic dredges to remove sediment and water from the river. The sediment will be separated from the water and sent by truck to a nearby landfill owned by the company. There, sediment will be permanently buried. The separated water will be treated to remove any remaining contaminants and returned to the river. The dredging work is scheduled to be completed by November. The sand cover placement is expected to be completed by November 15.

A silt curtain prevents sediment from moving downstream during the dredging operation at SMU 56/57.

Monitoring/Sampling

A monitoring/sampling program will be developed by Fort James Corporation to ensure that releases during dredging are minimal, and that significant elevated short-term risks do not occur because of dredging or related activities. Additionally, monitoring will be used to determine if cleanup standards are being met. Construction monitoring will consist of turbidity measurements upstream, downstream, and in and around the dredge/containment areas. Turbidity measurements evaluate the amount of disturbance (stirring up) of the sediment created by the dredging. The measurements will be compared to those upstream to determine if corrective actions are necessary. Previous dredging projects indicate that dredging stirs up sediment, however, PCB losses during dredging are minimal. Water samples will periodically be collected by Fort James Corporation and EPA to assess PCB contamination within the water column. Sediment will be collected and analyzed to determine if concentration goals in the dredging area are achieved.

The project will be monitored by EPA and DNR representatives. EPA representatives will be on site daily overseeing the ongoing work. DNR representatives will also be on site. In addition, EPA will be taking samples to ensure that cleanup and monitoring objectives are met. All technical documents including the sampling and monitoring plan, health and safety plan, and any summaries of the sampling and cleanup activities will also be reviewed and approved by EPA in consultation with DNR.

Profile On . . . Samuel Borries

Samuel ASam@ Borries is serving as EPA=s on-scene coordinator for the SMU 56/57 cleanup project. He has been with EPA since 1990. In his 10 years at EPA, he has worked on numerous emergency cleanups including Michigan=s Manistique and Pine Rivers, southern Illinois= Sauget PCB site, and several tire fires, oil spills, drum removals and pipeline breaks. His prior work experience includes doing site assessment and National Priorities List scoring for a Chicago environmental firm. The Illinois native holds a bachelor=s degree in geology from Eastern Illinois University and a master=s degree in business administration from Keller Graduate School of Management.

Profile On . . . Gary Kincaid

Gary is serving as the DNR=s on-scene representative for the SMU 56/57 cleanup. He has spent 20 years as a wastewater engineer at the DNR=s northeast regional office in Green Bay. During his tenure, he helped improve and maintain waterways in Brown, Door, and Kewaunee Counties. He has also administered wastewater permits for municipalities and companies throughout northeastern Wisconsin. Born in Port Edwards, WI, Gary holds a bachelor=s degree in limnology from the University of Wisconsin and a master=s degree in civil engineering with an environmental option from Marquette University.

Information Repositories

Copies of technical reports, fact sheets, and other documents related to the SMU 56/57 cleanup are available at information repositories set up in the reference sections of the following local libraries:

- **Appleton Public Library**, 225 N. Oneida St., Appleton, WI; 920-832-6170
- **Brown County Library**, 515 Pine St., Green Bay, WI; 920-448-4381, ext. 394
- **Door County Library**, 104 S. Fourth Ave., Sturgeon Bay, WI; 920-743-6578
- **Oneida Community Library**, 201 Elm St., Oneida, WI; 920-869-2210
- **Oshkosh Public Library**, 106 Washington Ave., Oshkosh, WI; 920-236-5200

An Administrative Record, which contains detailed information upon which the selection of the SMU 56/57 cleanup and final site cleanup plan will be based, is also available for review at the Appleton and Brown County Libraries.

For More Information

For more information about the cleanup, or any other aspects of the SMU 56/57 project, please contact:

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Check out these web sites:

http://www.dnr.state.wi.us/org/water/wm/lowerfox

http://www.epa.gov/region5/foxriver/

http://www.epa.gov/region5/foxriver/SMU_5657.htm

http://www.fws.gov/r9dec/nrdar/nrdamain.html

http://www.fws.gov/r3pao/nrda/

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